

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 0000054408	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/EP2004/003104	International filing date (day/month/year) 24.03.2004	Priority date (day/month/year) 28.03.2003
International Patent Classification (IPC) or national classification and IPC		
Applicant BASF AKTIENGESELLSCHAFT		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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International application No.

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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
 - ☐ international search (Rule 12.3 and 23.1(b))
 - ☐ publication of the international application (Rule 12.4)
 - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
 - ☐ the international application as originally filed/furnished
 - ☒ the description:
 - pages 1-9 _____ as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☒ the claims:
 - nos. _____ as originally filed/furnished
 - nos.* _____ as amended (together with any statement) under Article 19
 - nos.* 1-14 _____ received by this Authority on /filed with the demand
 - nos.* _____ received by this Authority on _____
 - ☒ the drawings:
 - sheets 1/1 _____ as originally filed/furnished
 - sheets* _____ received by this Authority on _____
 - sheets* _____ received by this Authority on _____
 - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages _____
 - ☐ the claims, nos. _____
 - ☐ the drawings, sheets/figs _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages _____
 - ☐ the claims, nos. _____
 - ☐ the drawings, sheets/figs _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-14	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-14	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1) Reference is made to the following documents:			
D1: US-A-5 269 980			
D2: DE-A-2 233 428.			
2) The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step within the meaning of PCT Article 33(3).			
2.1) Document D1 is considered the prior art closest to the subject matter of claim 1. It discloses (column 2, lines 50-66 and column 4, lines 1-4) a method for producing polymer particles wherein the polymerisation takes place in a spray reactor. The method is characterized in that a liquid starting solution containing monomers and a polymer catalyst is prepared (it is possible, <u>but not necessary</u> , to prepare the starting solution with prepolymerised monomers), the starting solution is transferred to the aerosol generator for the production of droplets,			

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

these droplets are nebulised in a thermal reactor and

the droplets are allowed to dwell in the thermal reactor for a period which suffices for the monomers to polymerise and to solidify.

Condensation polymerisation is one of the possible polymerisation methods cited.

The subject matter of claim 1 therefore differs from the known document D1 in that a defined condensation product (resin) is produced and the condensation is carried out using at least one aldehyde.

The problem to be solved by the present invention is therefore understood to be that of disclosing a method and the reactants necessary for the production of condensed resins in powder form, wherein the condensation is intended to take place in a spray reactor.

Document D2 discloses (page 1, lines 7-10 and page 3, lines 18-24) a reactive system which spontaneously polymerises in a spray reactor. As examples of the reactive system an aqueous urea formaldehyde solution and an aqueous melanin formaldehyde solution are given. A person skilled in the art would use this information in order to produce, for example, a formaldehyde resin in powder form using the method disclosed in document D1.

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citations and explanations supporting such statement

The solution proposed in claim 1 of the present application can therefore not be considered inventive (PCT Article 33(3)).

- 3) The same argument applies correspondingly to independent claim 13. The subject matter of claim 13 therefore does not involve an inventive step (PCT Article 33(3)).
- 4) Dependent claims 2-12 and 14 contain no features which, combined with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step. The features of these claims concern only some of several obvious possibilities from which a person skilled in the art would choose according to the circumstances, without thereby being inventive.